Fig.1

FORWARD PREDICTION
BACKWARD PREDICTION
TEMPORALLY PREVIOUS REFERENCE FRAME
CURRENT FRAME
TEMPORALLY SUBSEQUENT REFERENCE FRAME
TIME

Fig.2A

FORWARD PREDICTION
BACKWARD PREDICTION
DECODING TIME
TEMPORALLY PREVIOUS REFERENCE FRAME OUTPUT TIME INFORMATION: 0
TEMPORALLY SUBSEQUENT REFERENCE FRAME OUTPUT TIME INFORMATION: 2
CURRENT FRAME OUTPUT TIME INFORMATION: 1

Fig.2B

OUTPUT TIME
0
TEMPORALLY PREVIOUS REFERENCE FRAME
1
CURRENT FRAME
2
TEMPORALLY SUBSEQUENT REFERENCE FRAME

Fig.3

FORWARD PREDICTION
BACKWARD PREDICTION
TIME
TEMPORALLY PREVIOUS REFERENCE FRAM2
TEMPORALLY PREVIOUS REFERENCE FRAM1
CURRENT FRAME
TEMPORALLY SUBSEQUENT REFERENCE FRAME1
TEMPORALLY SUBSEQUENT REFERENCE FRAME2

Fig.4A

ORWARD PREDICTION
BACKWARD PREDICTION
DECODING TIME
TEMPORALLY PREVIOUS REFERENCE FRAME2 OUTPUT TIME INFORMATION: 0
TEMPORALLY PREVIOUS REFERENCE FRAME1 OUTPUT TIME INFORMATION: 1
TEMPORALLY SUBSEQUENT REFERENCE FRAME1 OUTPUT TIME INFORMATION: 3
TEMPORALLY SUBSEQUENT REFERENCE FRAME2 OUTPUT TIME INFORMATION: 4
CURRENT FRAME OUTPUT TIME INFORMATION: 2

Fig.4B

0
TEMPORALLY PREVIOUS REFERENCE FRAME2
1
TEMPORALLY PREVIOUS REFERENCE FRAME1
2
CURRENT FRAME
3
TEMPORALLY SUBSEQUENT REFERENCE FRAME1
4
TEMPORALLY SUBSEQUENT REFERENCE FRAME2
OUTPUT TIME

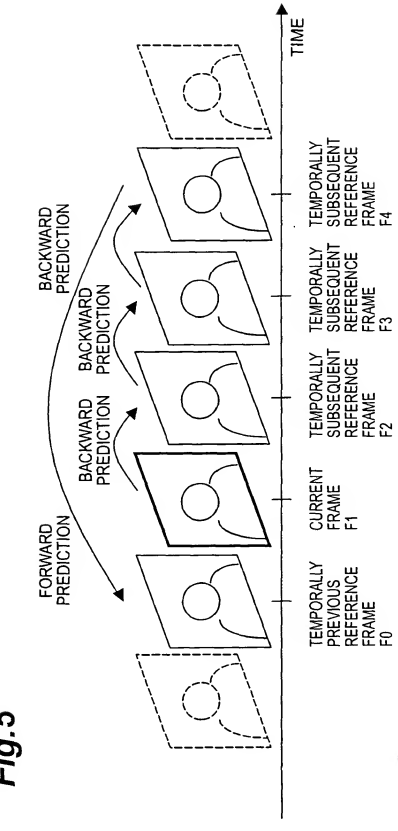

FORWARD PREDICTION
BACKWARD PREDICTION
BACKWARD PREDICTION
BACKWARD PREDICTION
TIME
TEMPORALLY PREVIOUS REFERENCE FRAME F0
CURRENT FRAME F1
TEMPORALLY SUBSEQUENT REFERENCE FRAME F2
TEMPORALLY SUBSEQUENT REFERENCE FRAME F3
TEMPORALLY SUBSEQUENT REFERENCE FRAME F4

Fig.5

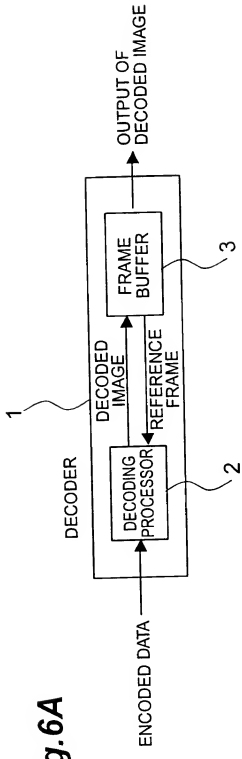

1
DECODER
DECODED IMAGE
REFERENCE FRAME
DECODING PROCESSOR
2
FRAME BUFFER
3
OUTPUT OF DECODED IMAGE
ENCODED DATA

Fig.6A

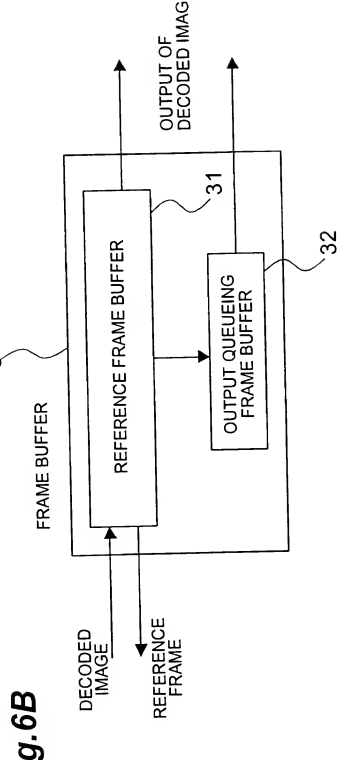

3
FRAME BUFFER
REFERENCE FRAME BUFFER
31
OUTPUT QUEUEING FRAME BUFFER
32
OUTPUT OF DECODED IMAGE
DECODED IMAGE
REFERENCE FRAME

Fig.6B

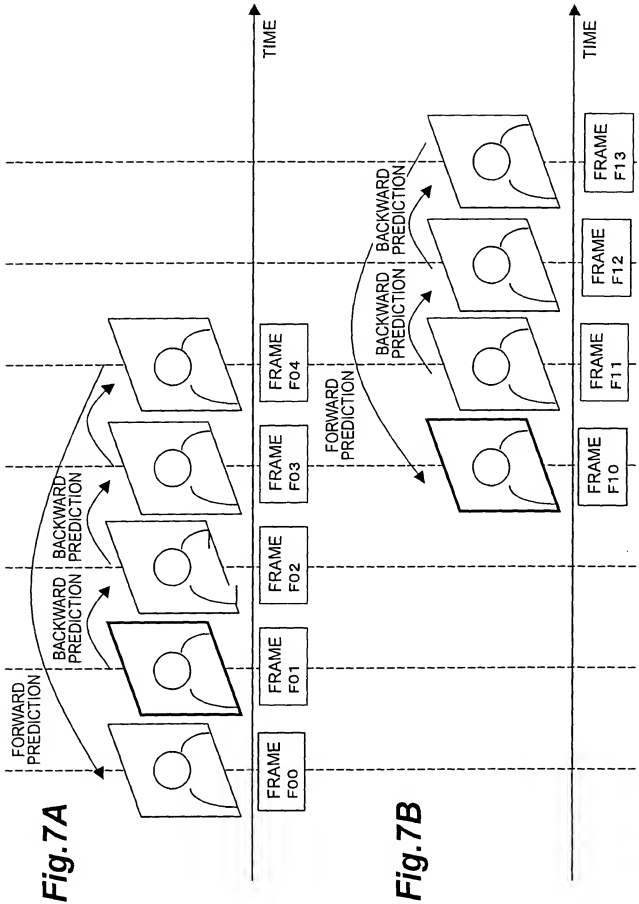

FORWARD PREDICTION
BACKWARD PREDICTION
BACKWARD PREDICTION
FRAME F00
FRAME F01
FRAME F02
FRAME F03
FRAME F04
TIME
FORWARD PREDICTION
BACKWARD PREDICTION
BACKWARD PREDICTION
FRAME F10
FRAME F11
FRAME F12
FRAME F13
TIME

Fig.7A

Fig.7B

Fig.8

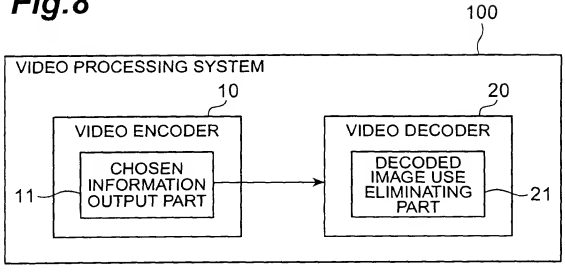

100
VIDEO PROCESSING SYSTEM
10
20
VIDEO ENCODER
VIDEO DECODER
CHOSEN INFORMATION OUTPUT PART
DECODED IMAGE USE ELIMINATING PART
11
21

Fig.9

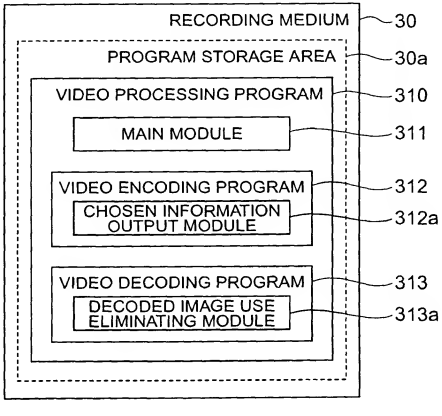

RECORDING MEDIUM
30
PROGRAM STORAGE AREA
30a
VIDEO PROCESSING PROGRAM
310
MAIN MODULE
311
VIDEO ENCODING PROGRAM
312
CHOSEN INFORMATION OUTPUT MODULE
312a
VIDEO DECODING PROGRAM
313
DECODED IMAGE USE ELIMINATING MODULE
313a

Fig.10

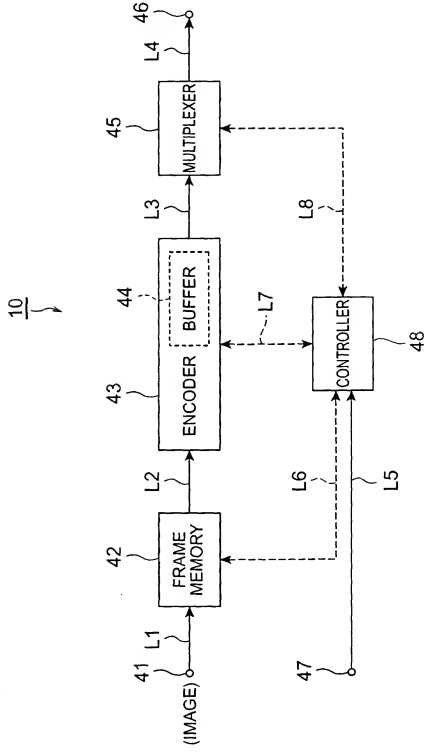

10
41
L1
(IMAGE)
FRAME MEMORY
42
L2
ENCODER
43
BUFFER
44
L3
MULTIPLEXER
45
L4
46
L7
CONTROLLER
48
L5
L6
47
L8

Fig.11

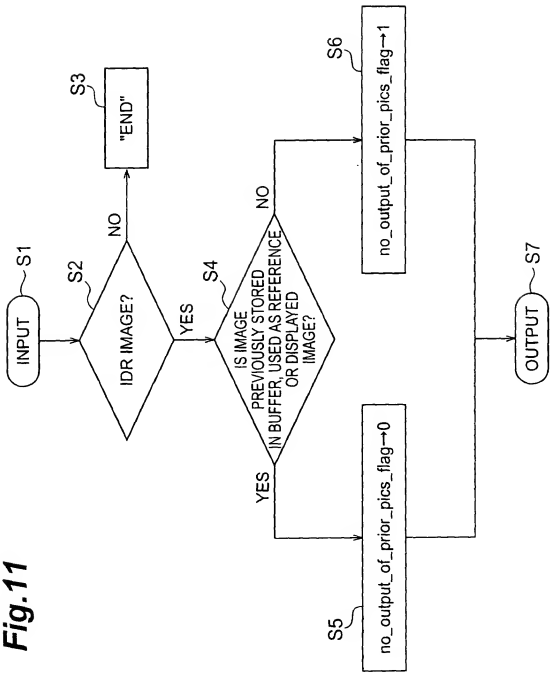
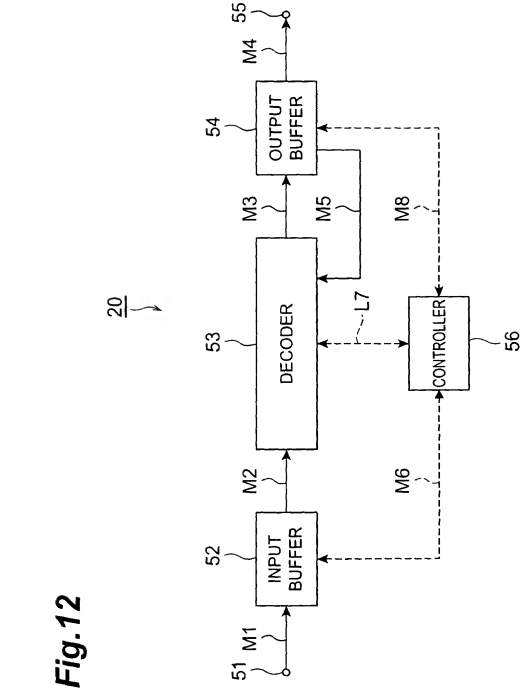

INPUT
S1
IDR IMAGE?
S2
NO
"END"
S3
YES
IS IMAGE PREVIOUSLY STORED IN BUFFER USED AS REFERENCE OR DISPLAYED IMAGE?
S4
NO
no_output_of_prior_pics_flag→1
S6
YES
no_output_of_prior_pics_flag→0
S5
OUTPUT
S7

Fig.12


20
51
M1
52
INPUT BUFFER
M2
53
DECODER
M3
54
OUTPUT BUFFER
M4
55
M5
L7
M6
CONTROLLER
56
M8